

**AMENDMENT TO THE CLAIMS**

**Please amend the claims as follows:**

1. **(Currently amended)** A composition comprising  
a polypeptide which comprises ~~[[a]] the sequence selected from the group consisting of surface located Campylobacter polypeptides~~ of SEQ ID NO: ~~[[1-51]]~~ 43, wherein  $X_1$  is V or A, and  $X_2$  is A or T, and  $X_3$  is T or A, or comprises an antigenic fragment or variant of said sequence,  
a polynucleotide comprising a sequence encoding said polypeptide,  
an expression vector comprising a sequence encoding said polypeptide,  
a recombinant virus or recombinant cell comprising said polynucleotide or said expression vector, or  
an antibody capable of binding said polypeptide,  
for use as a medicament.
2. **(Currently amended)** The composition of claim 1, wherein the composition comprises  
a polypeptide which comprises a sequence ~~selected from the group consisting of~~ SEQ ID NO: ~~[[1-51]]~~ 43, wherein  $X_1$  is V or A, and  $X_2$  is A or T, and  $X_3$  is T or A, or comprises an antigenic fragment or variant of said sequence,  
a polynucleotide comprising a sequence encoding said polypeptide,  
an expression vector comprising a sequence encoding said polypeptide, or  
a recombinant virus or recombinant cell comprising said polynucleotide or said expression vector.
3. **(Previously presented)** The composition of claim 1, wherein the variant has at least 95% sequence identity to said sequence.
4. **(Currently amended)** The composition of claim 1, wherein the antigenic fragment comprises less than 99% ~~of the full length of said sequence~~ sequence identity to said sequence.
5. **(Previously presented)** The composition of claim 1, wherein the antigenic fragment comprises less than 70 consecutive amino acid residues.

6. **(Previously presented)** The composition of claim 1, wherein the antigenic fragment comprises 6 or more consecutive amino acids of said sequence.

7. **(Currently amended)** The composition of claim 1, wherein the antigenic fragment comprises one or more residues of a fragment selected from the group consisting of SEQ ID NO:~~52-119~~ 74-81.

8. **(Previously presented)** The composition of claim 1, wherein the polypeptide comprises a tag.

9. **(Withdrawn)** The composition of claim 1, wherein the recombinant cell is an attenuated or reduced-virulence Escherichia coli cell or an attenuated or reduced-virulence Salmonella cell.

10. **(Withdrawn)** The composition of claim 1, wherein the recombinant cell is alive.

11. **(Withdrawn)** The composition of claim 1, wherein the recombinant cell is dead.

12. **(Previously presented)** The composition of claim 2, wherein the medicament is a vaccine.

13. **(Previously presented)** The composition of claim 12, wherein the composition comprises an immunogenic carrier.

14. **(Previously presented)** The composition of claim 12, wherein the composition comprises an adjuvant.

15. **(Withdrawn)** The composition of claim 1, wherein the composition comprises an antibody capable of binding a polypeptide selected from the group consisting of SEQ ID NO:1-36.

16. **(Withdrawn)** The composition of claim 15, wherein the antibody furthermore is capable of binding an intact Campylobacter jejuni cell.

17. **(Withdrawn)** The composition of claim 1, wherein the composition comprises an antibody capable of binding a polypeptide selected from the group consisting of SEQ ID NO:37-51 and capable of binding an intact Campylobacter jejuni cell.

18. **(Withdrawn)** The composition of claim 15, wherein the antibody is polyclonal.

19. **(Withdrawn)** The composition of claim 15, wherein the antibody is monoclonal.

20. **(Withdrawn)** The composition of claim 15, wherein the antibody is a human antibody or humanised antibody.

21. **(Withdrawn)** The composition of claim 15, wherein the antibody is a binding fragment of an antibody.

22. **(Withdrawn)** The composition of claim 15, wherein the antibody has a dissociation constant or  $K_d$  less than  $5 \times 10^{-6}M$ .

23. **(Previously presented)** The composition of claim 1, wherein the composition comprises a pharmaceutically-acceptable carrier.

24. **(Previously presented)** The composition of claim 1, wherein the composition is suitable for systemic administration.

25. **(Previously presented)** The composition of claim 1, wherein the composition is suitable for intravenous, intramuscular, or subcutaneous administration.

26. **(Previously presented)** The composition of claim 1, wherein the composition is suitable for oral administration.

27. **(Previously presented)** The composition of claim 1, wherein the composition is suitable for intranasal administration.

28. **(Withdrawn)** An antibody capable of binding a polypeptide selected from the group consisting of SEQ ID NO:1-36.

29. **(Withdrawn)** The antibody of claim 28, wherein the antibody furthermore is capable of binding an intact *Campylobacter jejuni* cell.

30. **(Withdrawn)** An antibody capable of binding a polypeptide selected from the group consisting of SEQ ID NO:37-51 and capable of binding an intact *Campylobacter jejuni* cell.

31. **(Withdrawn)** The antibody of any of claims 28 to 30, comprising a feature selected from a polyclonal antibody, a monoclonal antibody, a human antibody, a humanised antibody, a binding fragment of an antibody, and an antibody that has a dissociation constant or  $K_d$  less than  $5 \times 10^{-6}M$ .

32. **(Withdrawn)** A recombinant cell transformed or transfected with a polynucleotide comprising a sequence encoding a polypeptide, said polypeptide comprising a sequence selected from the group consisting of SEQ ID NO:1-36, or comprising an antigenic fragment or variant of said sequence.

33. **(Withdrawn)** The recombinant cell of claim 32, wherein the recombinant host cell is an Escherichia coli or Salmonella cell.

34. **(Withdrawn)** The recombinant cell of claim 32, wherein recombinant the cell is an attenuated or reduced-virulence cell.

35. **(Withdrawn)** A recombinant attenuated or reduced-virulence Escherichia coli or recombinant attenuated or reduced-virulence Salmonella cell transformed or transfected with a polynucleotide comprising a sequence encoding a polypeptide, said polypeptide comprising a sequence selected from the group consisting of SEQ ID NO:37-51, or comprising an antigenic fragment or variant of said sequence.

36-39 **(Cancelled)**

40. **(Withdrawn)** A method for raising antibodies to a polypeptide selected from the group consisting of SEQ ID NO:1-36 in a non-human animal comprising the steps of

providing

a polypeptide comprising a sequence selected from the group consisting of SEQ ID NO:1-36, or comprising an antigenic fragment or variant of said sequence,

a polynucleotide comprising a sequence encoding said polypeptide,  
an expression vector comprising a sequence encoding said polypeptide,

or

a recombinant virus or recombinant cell comprising said polynucleotide or said expression vector,

introducing a composition comprising said polypeptide, polynucleotide, vector, recombinant virus or recombinant cell into said animal,

raising antibodies in said animal, and

isolating and optionally purifying the antibodies.

41. **(Withdrawn)** A method for raising antibodies to a polypeptide selected from the group consisting of SEQ ID NO:37-51 in a non-human animal, wherein the antibodies are capable of binding an intact Campylobacter jejuni cell, the method comprising the steps of  
providing

a polypeptide comprising a sequence selected from the group consisting of SEQ ID NO:37-51, or comprising antigenic fragment or variant of said sequence,

a polynucleotide comprising a sequence encoding said polypeptide,  
an expression vector comprising a sequence encoding said polypeptide,

or

a recombinant virus or recombinant cell comprising said polynucleotide or said expression vector,

introducing a composition comprising said polypeptide, polynucleotide, vector, recombinant virus or recombinant cell into said animal,

raising antibodies in said animal,

isolating and optionally purifying the antibodies, and

selecting antibodies capable of binding an intact *Campylobacter jejuni* cell.

42. **(Withdrawn)** The method of claim 40 or 41, wherein the animal is a transgenic animal capable of producing human antibodies.

43. **(Withdrawn)** A method for detecting *Campylobacter jejuni* or parts thereof in a sample comprising the steps of

a. contacting said sample with an indicator moiety capable of specifically binding a polypeptide selected from the group consisting of SEQ ID NO:1-36, and

b. determining whether a signal has been generated by the indicator moiety, thereby detecting whether said sample contains *Campylobacter jejuni* or parts thereof.

44. **(Withdrawn)** The method of claim 43, wherein the indicator moiety furthermore is capable of binding intact *Campylobacter jejuni* cells.

45. **(Withdrawn)** A method for detecting *Campylobacter jejuni* in a sample comprising the steps of

a. contacting said sample with an indicator moiety capable of specifically binding a polypeptide selected from the group consisting of SEQ ID NO:37-51, wherein the indicator moiety furthermore is capable of specifically binding intact *Campylobacter jejuni* cells, and

b. determining whether a signal has been generated by the indicator moiety, thereby detecting whether said sample contains *Campylobacter jejuni*.

46. **(Withdrawn)** The method of claim 43, wherein said indicator moiety does not pass through the outer membrane of a *Campylobacter jejuni* cell.

47. **(Withdrawn)** The method of claim 43, wherein said indicator moiety consist of or comprises an antibody, such as an antibody as defined in any of claims 28 to 31.

48. **(Withdrawn)** A method for identifying a binding partner of a polypeptide selected from the group consisting of SEQ ID NO:1-36 or a fragment thereof, comprising the steps of

a. providing a polypeptide selected from the group consisting of SEQ ID NO:1-36 or a fragment thereof,

b. contacting said polypeptide or fragment with a putative binding partner, and

c. determining whether said putative binding partner is capable of binding to said polypeptide or fragment.

49. **(Withdrawn)** A method for identifying a compound with antibacterial activity against *Campylobacter jejuni* comprising the steps of

a. providing a sensitised cell which has a reduced level of a polypeptide selected from the group consisting of SEQ ID NO:1-36, and

b. determining the sensitivity of said cell to a putative antibacterial compound, for instance by a growth assay.

50. **(Withdrawn)** A method for identifying a compound with antibacterial activity against *Campylobacter jejuni* comprising the steps of

a. providing a sensitised cell which has a reduced level of a polypeptide selected from the group consisting of SEQ ID NO:37-51, and

b. determining the sensitivity of said cell to a putative antibacterial compound, for instance by a growth assay, wherein the putative antibacterial compound is not capable of passing through the outer-membrane of a wild-type *Campylobacter jejuni* cell.

51. **(Withdrawn)** A method for identifying an inhibitor of a polypeptide selected from the group consisting of SEQ ID NO:1-36, comprising the steps of

- a. providing two cells which differ in the level of a polypeptide selected from the group consisting of SEQ ID NO:1-36,
- b. determining the sensitivity of said cells to a putative inhibitor, for instance by a growth assay, and
- c. determining whether said two cells are differently affected by the presence of said putative inhibitor.

52. **(Withdrawn)** The method of claim 51, wherein the putative inhibitor does not pass through the outer membrane of a *Campylobacter jejuni* cell.

53. **(Withdrawn)** A method for identifying an inhibitor of a polypeptide selected from the group consisting of the polypeptides of SEQ ID NO:37-51, comprising the steps of

- a. providing two cells which differ in the level of a polypeptide selected from the group consisting of SEQ ID NO:37-51,
- b. determining the sensitivity of said cells to a putative inhibitor, for instance by a growth assay, wherein the putative inhibitor is not capable of passing through the outer membrane of a *Campylobacter jejuni* cell, and
- c. determining whether said two cells are differently affected by the presence of said putative inhibitor.

54. **(Withdrawn)** A method for treatment or prevention of *Campylobacter jejuni* infection in an animal or human being comprising the step of administering any one of the following

- a. a polypeptide which comprises any of the sequences of SEQ ID NO:1-51, such as any of the sequences of SEQ ID NO:1-36 or any of SEQ ID NO:37-51, or comprises a fragment or variant of any of said sequences,
- b. a polynucleotide comprising a sequence encoding said polypeptide,
- c. an expression vector comprising a sequence encoding said polypeptide,
- d. a recombinant virus or recombinant cell comprising said polynucleotide or said expression vector, or
- e. an antibody capable of specifically binding said polypeptide,

thereby treating or preventing a *Campylobacter jejuni* infections in said animal or human being.

55. **(Withdrawn)** A method a method for the immunisation of an animal or human being against *Campylobacter jejuni* infections comprising the step of administrating

- a. a polypeptide which comprises a sequence selected from the group consisting of SEQ ID NO:1-51, such as any of the sequences of SEQ ID NO:1-36 or any of SEQ ID NO:37-51, or comprises an antigenic fragment or variant of any of said sequences,
- b. a polynucleotide comprising a sequence encoding said polypeptide,
- c. an expression vector comprising a sequence encoding said polypeptide, or
- d. a recombinant virus or recombinant cell comprising said polynucleotide or said expression vector.